



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,204	07/31/2000	Kamran Uz Zaman	690-009312-US(PAR)D/99836	5766

7590 07/03/2002
Kevin P Correll
Perman & Green LLP
425 Post Road
Fairfield, CT 06430

EXAMINER

KAO, CHIH CHENG G

ART UNIT	PAPER NUMBER
----------	--------------

2882

DATE MAILED: 07/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/629,204

Applicant(s)

ZAMAN ET AL.

Examiner

Chih-Cheng Glen Kao

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-22 is/are rejected.
- 7) ☒ Claim(s) 16 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 10 April 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "10" and "12" in Figure 1 have both been used to designate bottom edge. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6-11, 15, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert et al. (U S Patent 5,352,329). Herbert et al. discloses an extra step of hand wiping for a bottom edge wipe method (col. 2, lines 1-11) which implies manually having a system and method for optically sensing manufacturing defect in OPC devices comprising: an illumination source for illuminating (light for the person to see), at least one optical sensor for capturing reflected illumination (human eyes), and a controller for comparing and classifying, which is associated with a visual or audio monitoring device and comprises a threshold detector, pixel

Art Unit: 2882

counter, and data storage area (human sensory and nervous system). However, Herbert et al. does not specifically disclose mechanical system.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to make a mechanical system or method of Herbert et al., since broadly providing a mechanical or automatic means to replace manual activity, which has accomplished the same result, involves only routine skill in the art. One would be motivated to use a mechanical system for faster manufacturing.

3. Claims 2-5, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert et al. as applied to claims 1 and 20 above, and further in view of Roy et al. (US patent 6118540). Herbert et al. suggests a system and method as recited above. However, Herbert et al. does not seem to specifically disclose a light emitting diode (LED), laser, emitter or CCD camera.

Roy et al. teaches an LED (col. 2, line 53), laser (col. 2, lines 60-64), emitter (col. 2, lines 60-64) or CCD camera (col. 2, lines 38).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the LED, laser, emitter, or CCD of Roy et al. with the suggested method and device of Hebert et al., since an LED, laser, emitter, or CCD are considered conventional in the art for radiation inspection systems as shown by Roy et al. One would be motivated to use these components to perform computer vision analysis as shown by Roy et al. (col. 2, lines 46-49).

Art Unit: 2882

4. Claims 13, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert et al. as applied to claims 11, and further in view of Lemmers et al. (US Patent 4641966). Herbert et al. suggests a system and method as recited above. However, Herbert et al. does not. However, Herbert et al. does not seem to specifically analog or digital signals.

Lemmers et al. implies analog (which is inherent before processing an electrical signal into a digital signal) and digital signals (col. 2, lines 30-35).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have analog or digital signals of Lemmers et al. with the suggested method of Herbert et al., since analog and digital signal processing is well known in the art as equivalent processing means for its use in the art of radiation inspection devices. The selection of any of known equivalent to process signals would be within the level of ordinary skill in the art. Lastly, the applicant has not disclosed that analog or digital signals solves any stated problem and it appears that the invention would perform equally well either processing means. One would be motivated to use analog signals to have a real-time accuracy in signal detection. One would be motivated to use digital signals for more advanced processing.

Allowable Subject Matter

5. Claims 16 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art does not specifically disclose or fairly suggest a *method* for optically discriminating or

Art Unit: 2882

classifying the residue on the bottom edge wipe manufacturing defect area of an organic photo conductor device by using gray level techniques as recited in the claim in combination with all the limitations in the claim, intervening claims if any, and the base claim.

Response to Arguments

6. Applicant's arguments filed 4/10/02 have been fully considered but they are not persuasive.

Regarding Herbert et al., the claim limitations are inherently suggested. The removal of excess coating inherently requires a person to recognize the defects as seen in Column 1, lines 63-65. The system and method claims can incorporate people.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2882

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (703) 605-5298. The examiner can normally be reached on M - Th (8 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

gk
June 28, 2002


ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800